

♂, pygidio dense rugoso, forcipis lobis dorsalibus longis, apice inflexis, subtus basi productis, approximatis.
 Long. 21 mm.; lat. max. 11.5 mm.

Hab. North Borneo: Kina Balu (*Whitehead*).

I have seen only two male examples of this. Like *A. biformis*, it has the lower surface of the body coppery green and the legs metallic crimson, but the upper surface is more green and the body is proportionately narrower.

IX.—Notes on *Fossorial Hymenoptera*.—II.

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On a Collection from the Solomon Islands.

THE species described here were collected by Mr. W. W. Froggatt, of Sydney, and sent to me for identification. One or two were sent to the British Museum by Mr. Woodford many years ago. As might be expected, they are nearly allied to New Guinea species, and many wide-ranging species were included, a list of which will be published by Mr. Froggatt.

Thynnus barbarus, sp. n.

♂. Clypeus large, very broadly truncate at the apex, the angles not produced, longitudinally striated, deeply punctured between the striæ, pointed at the base and joined by a very short narrow carina to the broadly rounded apex of the inter-antennal carina. Labrum finely punctured and ciliate at the apex, narrowly truncate on the apical margin, not emarginate or bilobed, projecting much beyond the clypeus. Head finely punctured rugulose, a deep frontal sulcus not reaching the anterior ocellus, the space between the posterior ocelli and the eyes shining and almost smooth. Antennæ of almost even thickness throughout, shorter than the thorax and median segment combined. Thorax and abdomen closely punctured, most finely and closely on the pronotum and sides of the mesonotum, pleuræ finely punctured. Pronotum narrowed anteriorly; the anterior margin almost as wide as the head, raised, with a transverse groove behind it. Scutellum large, very broadly rounded at the apex and very feebly subtuberculate in the middle of the apical margin. Median segment obliquely truncate from the postscutellum, the surface of the

truncation finely rugulose. Abdomen elongate-conical, the first segment truncate at the base; sixth ventral segment with a spine on each side at the apical angles; seventh dorsal segment produced into a flattened plate, longitudinally striated and narrowly truncate at the apex. Hypopygium with a spine on each side near the base and another at each of the apical angles and a strong apical spine, obliquely striated above. First ventral segment not carinate and not separated deeply from the second. Third abscissa of the radius half as long again as the second; first recurrent nervure received rather near the apex of the second cubital cell, second at one-quarter from the base of the third cubital cell.

Black; the orbits of the eyes interrupted at the summit and a small spot on each side on dorsal abdominal segments 4-5 and of ventral segments 2-5 pale yellow; the spots on the dorsal segments sometimes absent. Wings pale fusco-hyaline, nervures black.

Length 24, exp. 39 mm.

♀. Clypeus transverse, punctured, without a carina; mandibles falcate, deeply grooved above. Eyes not touching the base of the mandibles; the antennæ inserted further from each other than from the eyes; a deep shining depression above the base of the antennæ, extending to the eyes, but not reaching halfway to the vertex. Head deeply and closely punctured, more than half as broad again as long, somewhat flattened, the vertex broadly smooth and shining. Pronotum coarsely punctured, with an obscure, longitudinal, median carina, about one-third broader than long, rectangular, the anterior margin with a row of long hairs; scutellum small, finely punctured and clothed with long hairs; median segment shorter than the scutellum, smooth and shining and obliquely truncate posteriorly. First abdominal segment truncate anteriorly, the dorsal surface finely and closely punctured, clothed with long hairs in the middle, the apical margin narrowly depressed; second segment with about twelve transverse carinæ, low at the base, increasing in height to the apex, segments 3-5 smooth and shining; ventral segments shallowly punctured, the fifth coarsely longitudinally striated. Pygidium truncate posteriorly, sharply contracted at the base of the truncation, the dorsal plate trilobed, with arched carinæ at the base, the lateral lobes almost straight on the outer margin, the angles slightly prominent; ventral plate projecting beyond the dorsal, rounded, with an emargination at the apex, the lateral margins feebly serrate. Anterior tibiæ strongly emarginate at the apex, intermediate tibiæ thickened, the first joint of the

intermediate tarsi moderately thickened and spinose. Tarsal ungues bidentate.

Black, the pubescence cinereous; a spot on each side of the first dorsal abdominal segment, a smaller one on each side of the second, and a narrow transverse band narrowly interrupted in the middle near the apex of the third segment yellow. Spines of the tibiæ and tarsi dark fusco-ferruginous.

Length 16 mm.

Hab. Gavuta, Solomon Islands (*Froggatt*). 2 ♂, 1 ♀.

Allied to *T. serriger*, Sharp, and *T. olivaceus*, Turn., and belongs to the genus *Thynnus* in the most limited sense.

Anoplus (Episyron) froggatti, sp. n.

♀. Clypeus three times as broad as long, the apical margin transverse, not rounded. Second joint of the flagellum long, the first and second equal in length to the third and fourth combined. Eyes separated on the vertex by a distance about equal to the length of the third joint of the flagellum, the posterior ocelli a little further from each other than from the eyes. Pronotum short, broadly rounded anteriorly, the posterior margin very feebly arched. Scutellum large, slightly convex, broadly rounded at the apex. Median segment as broad at the base as long, slightly narrowed to the apex. Abdomen subsessile, opaque, the sixth dorsal segment narrowly rounded at the apex. Tarsal ungues bidentate, tibiæ spinose. First and third abscissæ of the radius equal, united a little longer than the second, the second cubital cell half as long again as the third on the cubital nervure, the recurrent nervures received by the second and third cubital cells respectively beyond two-thirds from the base; cubitus of the hind wing originating just before the transverse cubital nervure.

Opaque black, the margins of the eyes very narrowly, broadly interrupted on the summit, a spot at the apex of the coxæ and a spot on each side at the base of the third dorsal segment of the abdomen dull creamy white; clypeus and front clothed with fine white pubescence; postscutellum, median segment, and first dorsal segment of the abdomen thinly covered with blue scale-like hairs. Wings hyaline, the apex fuscous from the apex of the radial cell.

Length 11 mm.

Hab. Solomon Islands (*Froggatt*). July.

Very near *papuensis*, Sm., but differs in the clypeus, which is rounded in *papuensis* at the apex; the present species also has the third abscissa of the radius longer and the apical

dorsal segment of the abdomen more distinctly rounded at the apex. The coloured marks are more numerous and more extensive on *papuensis*. In the form of the clypeus the present species resembles *lepidohirtus*, Turn., from Queensland, but in that species the median segment is much broader, the third abscissa of the radius shorter, as in *papuensis*, and the recurrent nervures received further from the apex of the cells. The differences are probably of subspecific rather than of specific importance.

Cryptocheilus (Priocnemis) woodfordi, sp. n.

♀. Clypeus twice as broad as long, slightly convex, porrect and almost transverse at the apex, covered with very fine golden pubescence, with a few scattered punctures each bearing a long fulvous hair, the apical margin smooth. Head covered with fine golden pubescence; eyes very slightly converging towards the vertex, where they are separated by the length of the third and half of the fourth joints of the flagellum, the posterior ocelli twice as far from the eyes as from each other; first and second joints of the flagellum combined almost as long as the third and fourth. Pronotum broadly arched posteriorly, postscutellum strongly raised in the middle, subtuberculate, median segment transversely rugosely striated, with a tubercle on each side at the base. Abdomen shining, slightly pruinose, the second ventral segment with a transverse groove. Tarsal ungues with one tooth before the middle. Second abscissa of the radius equal in length to the third, nearly twice as long as the first; second recurrent nervure received just before one-third from the base of the third cubital cell, first just before the apex of the second cubital cell. Cubital nervure of the hind wing originating just beyond the transverse median nervure, almost interstitial.

Ferruginous; abdomen black; wings entirely fuscous with bright purple-blue gloss.

Length 20–25 mm.

Hab. Rauro, Solomon Islands (*Woodford*).

Very near *fervidus*, Sm., from Aru.

Smith states that the clypeus of *fervidus* is rounded at the apex. This is not the case in a specimen from Dory, New Guinea, identified as *fervidus* by Smith. This is the specimen referred to by him (*Journ. Proc. Linn. Soc. iv. p. 120, Suppl. 1860*), and has the tarsal ungues bifid not toothed. I have not seen typical *fervidus*, but if the tarsal ungues are toothed the present species will only stand as a geographical

race, *C. fervidus* subsp. *woodfordi*. It can be easily distinguished by the absence of the flavo-hyaline patch at the base of the wings.

Cryptocheilus (Priocnemis) salomonis, sp. n.

♀. Clypeus more than twice as broad as long, slightly convex, almost transverse at the apex; the labrum exposed, broad and transverse. Head, pronotum, and sides of the thorax sparsely clothed with long black hairs; eyes converging very slightly towards the vertex, where they are separated by a distance equal to the length of the third and one-third of the fourth joint of the flagellum, the posterior ocelli a little further from the eyes than from each other. First and second joints of the flagellum a little shorter than the third and fourth combined. Posterior margin of the pronotum strongly arched. Median segment indistinctly transversely striated, with a low blunt tubercle on each side at the base. Abdomen shining, sparsely punctured, the apical segment clothed with stiff fulvous hairs. Third abscissa of the radius as long as the first and second combined; first recurrent nervure received a little before the apex of the second cubital cell, second at middle of the third cubital cell. Cubital nervure of the hind wing interstitial with the transverse median nervure. Posterior tibiæ strongly serrate, tarsal ungues with one tooth. Black; femora, tibiæ, tarsi, and scape ferruginous brown. Wings fuscous, with a strong purple gloss.

Length 24–26 mm.

Hab. Savo, Solomon Islands (*Woodford*).

A specimen sent by Mr. Froggatt from the Solomon Islands, without any more definite locality, has the flagellum wholly ferruginous.

Pseudagenia numeria, Sm., subsp. *mendana*, subsp. n.

♀. Differs from *numeria* in the sculpture of the median segment, which is distinctly transversely striated except at the base; there is also an obscure median sulcus at the base and at the apex. The segment is also a little broader in proportion to the length, and the second joint of the flagellum is a little longer. The second recurrent nervure is received at one-third from the base of the third cubital cell in the present form and at two-fifths from the base in *numeria*. *P. valeria*, Turn., from Queensland, is another subspecies in which the median segment is distinctly margined laterally